

CLINTON LABORATORIES

- 2. M. D. Whitaker
- 3. S. W. Pratt
- 4. WCK File
- 5. Central File
- 6. Reading File

DATE 1/5/44

DEPARTMENT Research

DEPARTMENT Plant

R. L. Doan

FROM W. C. Kay

IN RE:

INCREASED LOADING OF CLINTON PILE

We note in J. A. Wheeler's weekly report of December 14 that various means of loading the Clinton pile have been considered, and that by flattening it somewhat not only some 20% more gross power is obtainable, but an increase in concentration of product per ton as well. If the pile eventually is to be shortened and expanded, we should make plans to do so at once. The manner in which we discharge metal from now on should be determined by the ultimate configuration desired.

Mr. Wyatt has made some rough calculations indicating that the temperature distribution curve through the pile can be flattened, thus increasing the number of slugs at maximum temperature, by poisoning through the center of the pile. This proposal seems very worthwhile as an immediate means of increasing production perhaps to a little over 1000 KW.

We need the assistance of a physicist on production problems of this kind very badly, and request that someone be assigned to work with Wheeler and Sinclair on these problems. Early decisions as (a) how to poison with present loading and (b) how to work up to an expanded loading, are urgently needed.

This document has been approved for release to the public by:

David R. Hamlin 1/20/45
 Technical Information Officer Date
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CLASSIFICATION CANCELLED
 DATE SEP 20 1963
 For The Atomic Energy Commission
H. R. Cansell
 Chief, Declassification Branch

#1269